This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended):   A computer-assisted diagnosis method for assisting diagnosis of three-dimensional digital image data, comprising the steps of:

    identifying three-dimensional objects within the three-dimensional image data;

    for a given three-dimensional object:

        determining a local spinning plane for the given object, the local spinning plane being centered at a centroid and a local spinning axis of the given object;

        rotating the local spinning plane at least a portion of 360 degrees; and

        automatically creating a view of the given object at computer selected predefined increments of rotation, so as to result in a plurality of views of the given object at predefined angles in the rotation that are displayed in sequence as a cine loop.

Claim 2 (Currently Amended):   A computer-assisted diagnosis method for assisting diagnosis of three-dimensional digital image data, comprising the steps of:

    receiving indicia identifying at least one region of interest in a digital medical image; and

    identifying three-dimensional objects within the at least one region of interest;

    for a given three-dimensional object within the at least one region performing the following computer-implemented steps:

determining an extent, a centroid, and a local spinning axis of the given object;

determining a local spinning plane for the given object, the local spinning plane being centered at the centroid and the local spinning axis;

rotating the local spinning plane at least a portion of 360 degrees, wherein said rotating step comprises the step of:

automatically creating a view of the given object at ~~predefined~~ computer selected increments of rotation, so as to result in a plurality of views of the given object at predefined angles in the rotation that are displayed in sequence as a cine loop.

Claim 3 (Original):   The method according to claim 2, wherein said step of determining the extent of the given object comprises the step of examining connected voxels within a predefined volume on adjacent tomographic slices .

Claim 4 (Original):   The method according to claim 2, wherein the local spinning plane is initially oriented at a same angle as a current two-dimensional view of the three-dimensional digital image data.

Claim 5 (Original):   The method according to claim 2, wherein said step of providing the plurality of views of the given object further comprises the step of providing a plurality of views of areas surrounding the given object.

Claim 6 (Original):   The method according to claim 2, wherein the indicia is provided from a user through one of a mouse and an eye tracking device.

Claim 7 (Original):   The method according to claim 2, wherein said providing step further comprises the step of determining at least one of a volume, a geometrical location, and a center of mass of the given object.

Claim 8 (Original):   The method according to claim 2, wherein said providing step further comprises the step of determining one of a circularity and a sphericity of the given object.

Claim 9 (Original):   The method according to claim 2, wherein said providing step further comprises the step of determining a mean, a variance, and a min/max of intensity values within the given object.

Claim 10 (Original):   The method according to claim 2, wherein said providing step further comprises the step of determining a texture, a surface smoothness, and regularity measures of the given object.

Claim 11 (Original):   The method according to claim 2, wherein said providing step further comprises the step of determining two-dimensional and three-dimensional shape measures of the given object.

Claim 12 (Original):   The method according to claim 2, further comprising the step of storing results from said providing step in a table for comparison with at least one of preceding or succeeding scans of a same patient.

Claim 13 (Original):   The method according to claim 12, further comprising the step of storing a confidence value in the table that indicates an estimate of a clinical relevance of the given object.

Claim 14 (Original):   The method according to claim 2, further comprising the steps of:

        setting thresholds for particular features of particular objects that represent whether the particular objects are abnormal; and

identifying a given object that exceeds a given threshold.

Claim 15 (Currently Amended):   A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform steps for computer-assisted diagnosis of three-dimensional digital image data, said method steps comprising:

receiving indicia identifying at least one region of interest in a digital medical image; and

identifying three-dimensional objects within the at least one region of interest;

for a given three-dimensional object within the at least one region performing the following computer implemented steps:

determining an extent, a centroid, and a local spinning axis of the given object;

determining a local spinning plane for the given object, the local spinning plane being centered at the centroid and the local spinning axis;

rotating the local spinning plane at least a portion of 360 degrees, wherein said rotating step comprises the step of:

automatically creating a view of the given object at ~~predefined~~ computer selected increments of rotation, so as to result in a plurality of views of the given object at predefined angles in the rotation that are displayed in sequence as a cine loop.

Claim 16 (Original):   The program storage device according to claim 15, wherein said step of determining the extent of the given object comprises the step of examining connected voxels within a predefined volume on adjacent tomographic slices .

Claim 17 (Original): The program storage device according to claim 15, wherein the local spinning plane is initially oriented at a same angle as a current two-dimensional view of the three-dimensional digital image data.

Claim 18 (Original): The program storage device according to claim 15, wherein said step of providing the plurality of views of the given object further comprises the step of providing a plurality of views of areas surrounding the given object.

Claim 19 (Original): The program storage device according to claim 16, wherein the indicia is provided from a user through one of a mouse and an eye tracking device.

Claim 20 (Original): The program storage device according to claim 15, wherein said providing step further comprises the step of determining at least one of a volume, a geometrical location, and a center of mass of the given object.

Claim 21 (Original): The program storage device according to claim 15, wherein said providing step further comprises the step of determining one of a circularity and a sphericity of the given object.

Claim 22 (Original): The program storage device according to claim 15, wherein said providing step further comprises the step of determining a mean, a variance, and a min/max of intensity values within the given object.

Claim 23 (Original): The program storage device according to claim 15, wherein said providing step further comprises the step of determining a texture, a surface smoothness, and regularity measures of the given object.

Claim 24 (Original): The program storage device according to claim 15, wherein said providing step further comprises the step of determining two-dimensional and three-dimensional shape measures of the given object.

Claim 25 (Original): The program storage device according to claim 15, further comprising the step of storing results from said providing step in a table for comparison with at least one of preceding or succeeding scans of a same patient.

Claim 26 (Original): The program storage device according to claim 25, further comprising the step of storing a confidence value in the table that indicates an estimate of a clinical relevance of the given object.

Claim 27 (Original): The program storage device according to claim 15, further comprising the steps of:

setting thresholds for particular features of particular objects that represent whether the particular objects are abnormal; and

identifying a given object that exceeds a given threshold.